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10/636,015	08/06/2003	Bruno Senn	IVd09US	9132

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EXAMINER

TIBBITS, PIA FLORENCE

ART UNIT	PAPER NUMBER
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2838

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/636,015

Applicant(s)

SENN ET AL.

Examiner

Pia F. Tibbits

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/6/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of modules, the two modules, the plurality of electrical supply contacts, the multiple-prong plug, the transmission to the base station, the housing (for the connection module), the housing (for the service module), the fixed address, the same rank, the calibration data, the light output performance data, the mass data, the operational time data, the single signal connection, the storage battery assembly microcontroller, the reading, etc. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter: "plurality of modules", "the plurality of electrical supply contacts", "multiple-prong plug", "adjustment of the hand-held device", "operational condition", "fixed address", "same rank", "calibration data...are stored", "light output performance data...are stored", "mass data...are stored", "operational time data...are stored", "requires solely a single signal connection", "the storage battery assembly includes a micro-controller", "reading via the data bus", etc. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.
5. Applicant is reminded to use consistent language throughout the disclosure in order to facilitate finding support for the recited limitations, as well as to provide proper antecedence for all claimed limitations. For example, applicant claims a "plurality of modules" (claim 1), a "connection module" (claim 5), and a "service module" (claim 7), which makes it unclear as to what "the" module is.
6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed, i.e., a power sharing structure.

Claim Objections

7. Claims 2, 8, 9, 14 are objected to because of the following informalities:
Claim 2: ---electrical power supply--- to replace "electrical supply".
Claim 8: the recitation "the connection module (24), the storage battery assembly (22), and a service module (62) have upon disposition thereof into operational contact with the hand-held device (10), an outer configuration which extends flush with a surface of the hand-held device (10)" contradicts the specification which describes "**a service module 62 can also be**

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installed or inserted into the hand-held device 10 **in lieu of the connection module 24**". In other words, the hand-held device will only use one power supply at a time.

Claim 9: the recitation "**securement** with the base station (30) via receipt of at least a portion thereof in the housing (20) and **securement** of the respective module onto the base station (30)" is idiomatic.

Claim 14: the recitation "calibration data, light output performance data, mass data, and operational time data of the light polymerization device are stored in at least the hand-held device" is idiomatic and awkward since a memory stores data, not the hand-held device.

The above are but a few specific examples of indefinite and functional or operational language used throughout the claims, and are only intended to illustrate the extensive revision required for the instant application. The above-mentioned corrections therefore, are in no way a complete and thorough listing of every indefinite and functional or operational language used throughout the claims. Applicant is required to revise all of the claims completely, and not just correct the indefinite and functional or operational language mentioned. The following art rejections are given in view of the above objections. Therefore, the following art rejections are applied only as far as the claims are understood in view of rejections made under the second paragraph of 35 USC 112.

Art Rejection Rationale

8. At the outset, the examiner notes that claims are to be given their broadest reasonable interpretation in light of the supporting disclosure. *In re Zletz*, 893 F.2d 319, 321, 13 USPQZd 1320, 1322 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969); *In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984); *Burlington Indus. V. Quigg*, 822 F.2d 1581, 3 USPQZd 1436 (Fed. Cir. 1987); *In re Morris*, 43 USPQZd 1753, 1756 (Fed. Cir. 1997). ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language

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explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”). In responding to this Office action, applicants are reminded of the requirements of 37 CFR 1.111 and 1.119 that applicants specifically point out the specific distinctions believed to render the claims patentable over the references in presenting responsive arguments. See MPEP 714.02. The support of any amendments made should also be specifically pointed out. See MPEP 2163.06.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art disclosed by applicant, **Mann** [5471129] in view of **Fiebig** [5539297].

As to claims 1-4: the claim language is confusing due to the inconsistency between the preamble and the body of the claim, i.e., scope of the claims is unclear. According to the preamble of claim 1, the claims are directed to a light polymerization device/hand held device 10, i.e., subcombination, while in the body of the claims, in at least one instance, there is a positive recital of structure indicating that the combination of the light polymerization device 10 and the base station 30 is being claimed, as being included in a module (lines 1-3). Thus, it is not clear if applicant's intent is to claim merely the light polymerization device or the light polymerization device/hand held device in combination with the base station. Applicant should clarify what the claims are intended to be drawn to and should ensure that the claim language is consistent with applicant's intent. Furthermore, applicant should note that in formulating the rejections on the

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merits of claim 1, it has been considered that the claims are drawn to the combination of the light polymerization device and the base station.

Mann discloses in figures 1-4 a light polymerization device, comprising: a module including at least a base station/recharging unit 10, a hand-held device 12, and a storage battery assembly 68 securable to the hand-held device 12. Mann does not disclose a plurality of modules, and a data bus provided between at least two modules via which data, in particular control data for the hand-held device are transferable.

With regard to the limitation of having plurality of modules, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of modules in order to be able to recharge an increased number of hand-held devices, as disclosed by Mann, since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) and MPEP 2144.04.

Fiebig discloses data bus/conductors 52.1-54.n connecting base stations/modules 1.1-1.n, so that the modules could be switched on/off according to battery parameters [see column 3, lines 49-54]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Mann's apparatus and include data bus/conductors 52.1-54.n connecting a plurality of modules 1.1-1.n, as disclosed by Fiebig, in order to be able to control recharging according to battery parameters.

As to claim 2, Mann and Fiebig disclose connections [no reference numbers] to conductors 112 and 113 as electrical power supply contacts, and ports [no reference numbers] for data bus/conductors 52.1-54.n.

With regard to the particular location of the data bus (connection), i.e., adjacent to a plurality electrical power supply contacts, absent any criticality, is only considered to be an obvious modification as it has been held by the courts that there would be no invention in shifting the location of a structure of a device to another location if the operation of the device

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would not thereby be modified. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) MPEP 2144.04

As to claims 3 and 4, see remarks for claim 1 above.

11. Claims 5, 6, 8, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mann and Fiebig**, as described above, in view of **Sainsbury et al.** [hereinafter Sainsbury] [6104162].

As to claim 5, Mann and Fiebig do not disclose a connection module connected with an external electrical supply source, and the connection module is connectable with at least one of the hand-held device and the base station.

Sainsbury discloses in figures 1-6 a connection module 15 connected with an external electrical supply source, and the connection module is connectable with at least one of the hand-held device and the base station [see figures 1 and 2]. The multi-functional power block is capable of being powered from multiple energy sources including, but not limited to, AC mains, DC power or fuel cell, and receiving power from the multi-functional power block and fit into the recess in the hand-held device which receives the power pack [see column 1, lines 66-67; column 2, lines 1-4]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Mann's and Fiebig's apparatus and include a connection module, as disclosed by Sainsbury, in order to provide a multi-functional power block capable of being powered from multiple energy sources.

As to claim 6, see remarks and references for claim 5 above.

As to claim 8, Sainsbury discloses in fig.1 a service module/adaptor 36 sized to fit into the recess in the tool normally filled by its power pack, and having a recess sized to accept a power pack or multi-functional battery module.

As to claims 10, 11, 16 and 17: see remarks and references for claims 5 and 8 above.

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12. Claims 7, 9, 12-15, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mann, Fiebig, and Sainsbury**, as described above, in view of **Wagner et al.** [hereinafter Wagner] [5903462].

As to claim 7, Mann, Fiebig, and Sainsbury do not disclose the service module connected with a computer, such that at least one of an adjustment of the hand-held device into its operational condition, a calibration of the hand-held device and a transmission of data stored in a computer to at least one of the hand-held device, the storage battery assembly, and the base station can be effected.

Wagner discloses in figures 1-21 a hand-held device connected with a computer, such that at least one of an adjustment of the hand-held device into its operational condition, a calibration of the hand-held device and a transmission of data stored in a computer to at least one of the hand-held device, the storage battery assembly. The patent discloses a computer-implemented method and apparatus for controlling a hand-held device, and monitoring the operating parameters of the device. The control is embodied in software embedded on a processor within the device, which also communicates with remote software. An operator can run the device, or through the interaction of both software, operate the device from a remote location, and analyze data from a performance history recorded by the device [see also the abstract; fig.3]. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Mann's, Fiebig's, and Sainsbury's apparatus and include software embedded on a processor within the device, as disclosed by Wagner, in order to allow communication with remote software.

As to claim 12, the data bus being selected from a one one-wire bus and a serial bus: it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a selection for the data bus in order to accommodate communication with remote software, since it has been held that discovering an "optimum" or "preferred" value for a

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result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

As to claim 19, the hand-held device, the base station, and the storage battery assembly including a micro-controller: Mann discloses a micro-controller/control unit 54 for the base unit 10, and a micro-controller/control unit 94 for the hand-held device.

Official Notice is taken with regard to the storage battery including a micro-controller, since it is well known in the art to use a "smart battery" to power a hand-held device, i.e., a battery which has an on-board controller (preferably comprising a microprocessor), normally powered-up at all times in order to provide to or receive from a charger and/or device data, such as state-of-charge information, and by being normally powered, the battery controller can also log and/or store any data as required.

As to claims 9, 13-15, 16, 18, and 20, see remarks and references above.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

14. The Information Disclosure Statement (Form PTO-1449) filed 8/6/2003 references a foreign patent described only by abstract. Since this reference seems to be relevant to applicant's instant application, a full translation should be provided.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus: **Brotto et al.** [6218806] discloses a charging apparatus for charging a battery comprising a current source for providing current to the battery, a controller connected to the battery and to the current source for controlling charging of the battery, and a memory connected to the controller for storing information about the battery. The memory may also store information about the charging apparatus. Preferably, the memory is a non-volatile memory, such as E²PROM. A battery having a memory for storing information, a power device having a memory for storing information about the device, and a reading apparatus for reading the information stored in the memory of the charger, battery and/or power device are also disclosed. **Brotto** [6175211] discloses in fig. 3, a "**smart battery**" 10, powering a hand-held device, which has an on-board controller 40 (preferably comprising a microprocessor 41), normally powered-up at all times, that can provide to or receive from the charger and/or device data, such as state-of-charge information; by being normally powered, controller 40 can also log and/or store any data as required. **Koenck** [4553081] discloses a "**smart battery**" powering a hand-held device [see fig.1].

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is (571) 272-2086. If unavailable, contact the Supervisory Patent Examiner Mike Sherry whose telephone number is (571) 272-2084. The Technology Center Fax number is (703) 872-9306.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

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see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PFT

Pia Tibbits

March 11, 2005

Primary Patent Examiner

